October - Lesson Plan Grades 2-3





Begin each nutrition education lesson with a short physical activity break from the card set provided by IDPH. Have fun and get active with your students!

Objectives

Learn the special characteristics of carrots, radishes and jicama.

Learn that vegetables are easy to eat as snacks.

Supplies Needed

October
Pick a **better** snack[™] & **Act**bingo cards

Jicama, carrots, (sliced large carrot and baby carrots) and/or radish for taste samples

Knife

3rd Grade: "Cryptogram" worksheet

Tasting Opportunities

Featured Vegetables: Carrot Jicama Radish

Background

Carrots: Carrots originated in Asia, near Afghanistan. At that time, carrots were shades of purple! In the 16th century, orange carrots were developed in Holland in honor of William I of Orange. The orange-colored carrots were shipped from Europe to the early American settlers.

Carrots grow in a host of other colors including white, yellow, or red. The carrot is a plant with a thick, fleshy, deeply colored root, which grows underground, and feathery green leaves that emerge above ground. Carrot roots have a crunchy texture and a sweet and minty aromatic taste, while the greens are fresh tasting and slightly bitter.

Most people refer to carrots as the vegetable that is good for our eyes. This is because carrots are an excellent source of beta-carotene that converts to a vitamin A in our bodies. Vitamin A is very important for healthy eyesight, skin, growth, and helps our body resist infection. In fact, carrots contain a group of plant pigments called carotenoids, and beta carotene is a member of this group. These plant pigments were first identified in carrots and therefore their name was derived from the word carrot. Carotenoids are linked to reducing chronic diseases such as cancer and heart disease.

There are many varieties of carrots. Carrots can be as small as two inches or as long as three feet, ranging in diameter from one-half of an inch to over 2 inches. Carrots are usually sold packaged in plastic bags. Baby carrots were once longer carrots that have been peeled, trimmed to 2 inches or smaller in length and packaged. True baby carrots are removed from the ground early and actually look like miniature carrots.

Jicama: [HEE-kah-mah] Jicama is often referred to as the *Mexican potato*. This large, bulbous root vegetable has a thin brown skin and white crunchy flesh. Its sweet, nutty flavor is good both raw and cooked. Jicama must be peeled before using.

Jicama is available from November through May and can be

VARY YOUR VEGGIES

purchased in Mexican markets and most large supermarkets. It is grown in Central America and Mexico. When cooked, jicama retains its crisp, water chestnut-type texture. It is a fair source of vitamin C and potassium.

Radish: Radishes are root vegetables that resemble beets or turnips in appearance and texture, but have a distinct flavor. It is the root of a plant classified in the mustard family. In the United States, radishes are usually eaten raw; however, they can be added to cooked dishes or served whole. The biggest crops grown in the United States come from California and Florida, but most states grow radishes.

Web Site Resources

www.idph.state.ia.us/pickabettersnack www.fruitsandveggiesmorematters.org www.choosemyplate.gov

Do the Activity: 2nd Grade

Play a word game in which you write the words "jicama" and "carrot" on the chalkboard. A student then adds the name of a vegetable vertically by using a letter in either of the words "jicama" or "carrot" that is also in their vegetable. Students then continue the game in the same manner.

Once the students understand the rules of the game, they may want to work with a partner or in small groups.

3rd Grade

Give each student a "Cryptogram" worksheet. The completed cryptogram reads "Another name for jicama is the Mexican potato." Have the students create their own cryptograms about carrots or radish.

Talk It Over:

Jicama, radish and carrots are roots.

Do you remember what the root part of a plant does? Roots function like feet. They help plants stay firmly in the soil. They take up water for the plants. Nutrients from the soil enter plants through their roots and help them grow. The water and minerals move from the roots to the stems.

What color groups would jicama, radish and carrot fit into? Jicama – white or tan/brown; Radish – red; Carrot – yellow/orange

Apply:

Pick a **better** snack[™] reminds students that it is easy to eat vegetables as snacks. Have students raise their hands if





VARY YOUR VEGGIES



Tasting Opportunity

they have never eaten a carrot. Have students raise their hands if they have never eaten a radish. Have students raise their hands if they have ever seen or tried jicama. Have the students wash their hands. Cut up jicama for the students to sample. Jicama has a bland flavor similar to raw potato. Students could dip a small wedge in salsa to jazz up the flavor. Prepare a radish and carrot to sample. Ask students if they can taste any difference between a sliced large carrot and a baby carrot.

Remind them that they can then put an "X" through the square of the vegetable that they just sampled.

What would you do (with adult help) to the featured October bingo card vegetables to get them ready to eat as a snack?

Carrot – Wash. Eat. Or Peel. Eat. (How easy is that?)

Radish- Wash. Slice. Eat. (How easy is that?)
Jicama – Peel. Slice. Eat. (How easy is that?)

On the back of the Pick a **better** snack[™] & **Act** bingo card for each month, there is information for their parents and grandparents. Send the bingo card home and ask students to encourage their family to pick out a snack idea to try at home



VARY YOUR VEGGIES

Extend the Activity



Art, Music & PE

Sing the song *Head and Shoulders, Knees and Toes*. Ask the students if they were a plant, what part would be the flower (head), the leaves (arms), the stem (torso and legs), and the roots (feet). Sing the song again using the parts of the plant.



Language Arts & Reading

After students have tasted the jicama they can create an Acrostic poem. The other name for an Acrostic poem is a Name poem. For example:

Just try something new It is crunchy and sweet

Cook it

And eat it

My goodness, it's a treat And good for you, too!



Math

Let the students estimate the typical length of a carrot by looking at and touching it. Discuss how they came up with their estimates. What form of measurement would they use to measure their carrot? Let them measure the carrot to find out how close they were to their estimation.



Science & Health

Discuss the appearance of roots on a variety of plants. A good way to observe growth is to sandwich a large seed (bean varieties tend to do very well in this experiment) between the wall of a clear jar and a moist paper towel. Keep the towel moist and students will be able to observe the roots as they begin to develop.



Social Studies

Locate Mexico on a map to indicate origins of jicama. You may want to try: www.foodreference.com/html/art-jicama-history-facts.html.



Crypt ogram

Decode the message by finding the substitute letter for each numbered space.

Α	В	С	D	Ε	F	G	Н	Ι	J	Κ	L	Μ	Ν	0	Р	Q	R	S	Τ	U	٧	W	Χ	Υ	Ζ
20	26	7	24	15	14	11	8	21	5	2	9	6	4	10	3	23	13	25	12	22	17	18	16	1	19





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20 4 10 12 8 15 13 4 20 6 15 14 10 13 5 21 7 20 6 20 21 25

12 8 15 6 15 16 21 7 20 4 3 10 12 20 12 10



